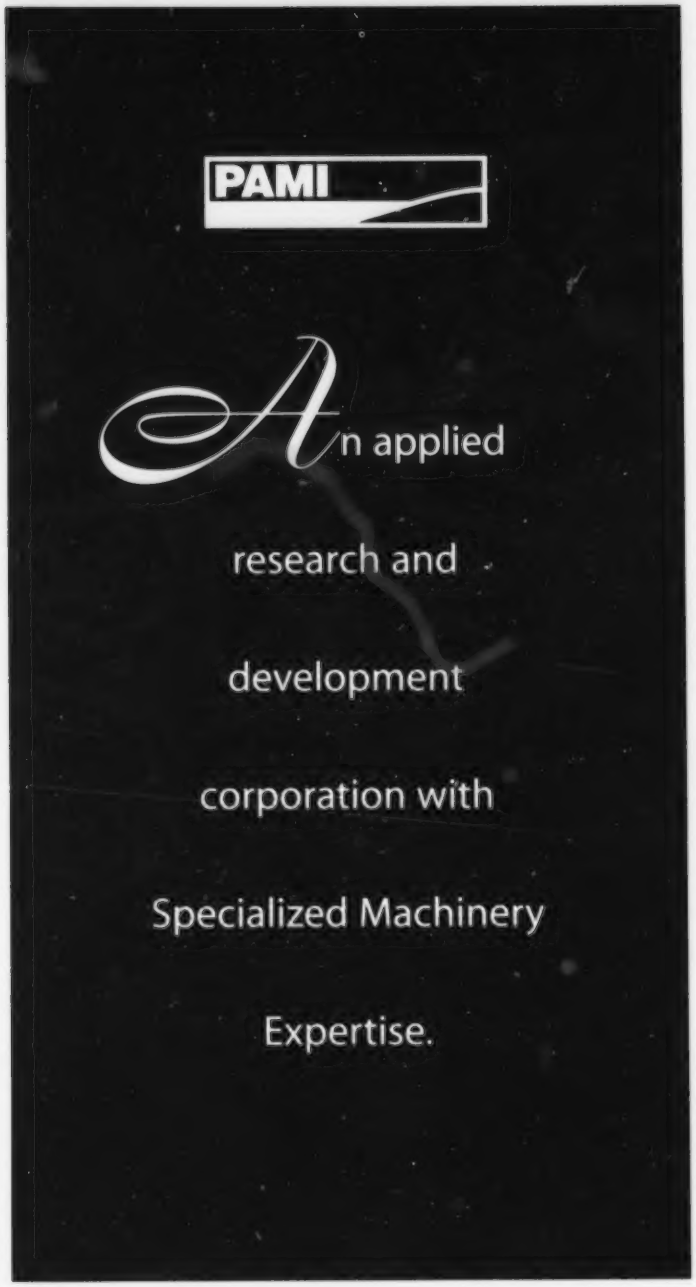
PAMI

Applying Technology for Agriculture

Innovation: Making Ideas Work

1998/99 Annual Report


PAMI
An applied
research and
development
corporation with
Specialized Machinery
Expertise.

Our Mission:

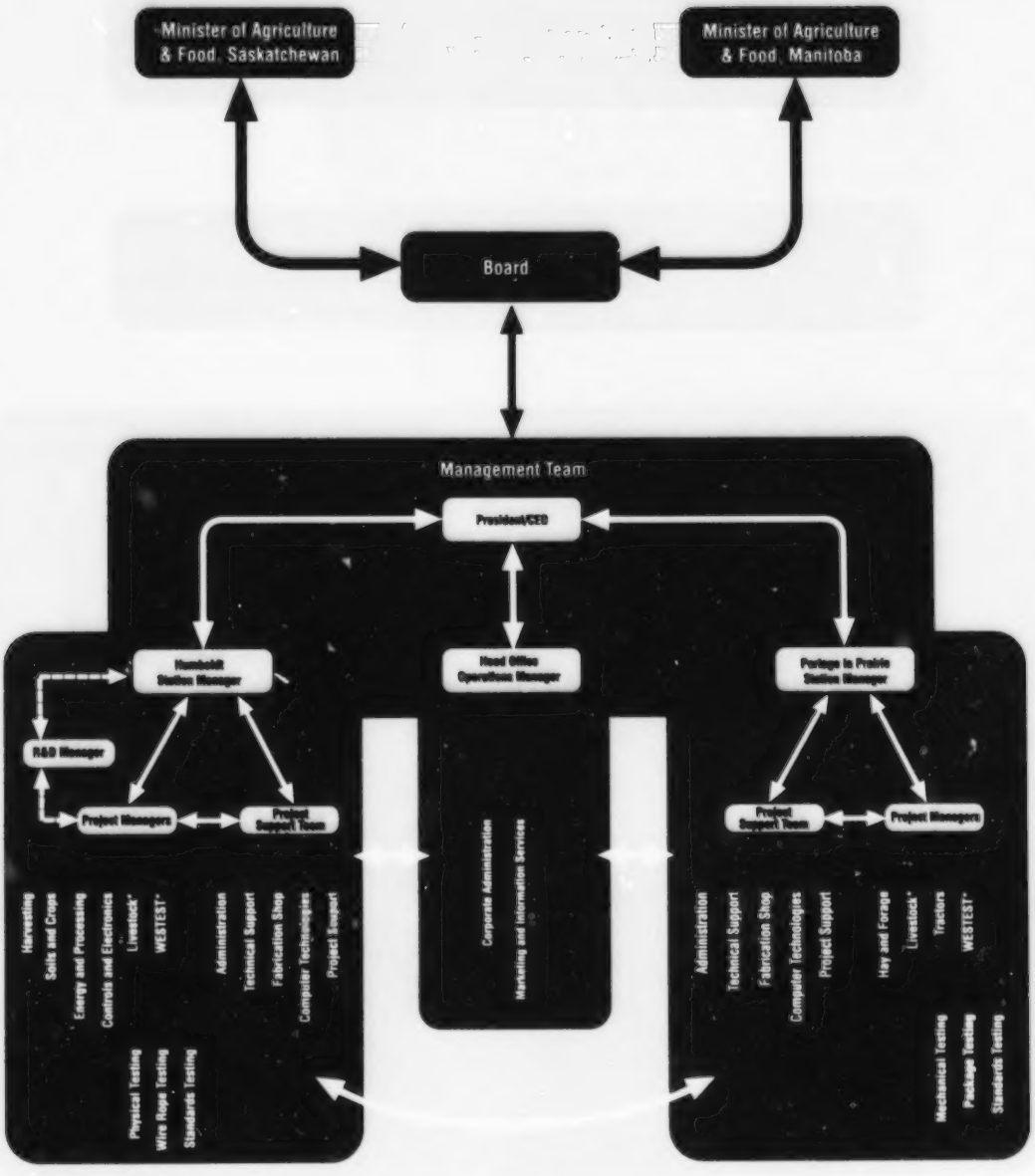
Applying Technology for Agriculture

We further economic development in Saskatchewan & Manitoba's Agricultural Industries by applying machinery-related technologies.

We provide applied research, experimental development, design, and testing/evaluation services for our clients, who are...

...agricultural producers, machinery manufacturers, agri-processors, and related organizations.

Pami Organization Chart



Arrows represent lines of communication

*** These services are offered in both provinces for purposes of client proximity.**

Our Vision:

Learning and Growth

PAMI is a leading applied research and development organization on the Prairies with a unique, provincially founded mission to apply technology for agriculture. This distinction has allowed us to develop key strengths that are valuable to our clients and stakeholders.

The agricultural industry on the Prairies continues to experience external forces of change. Canadian agriculture is largely unsubsidized, and has historically been a commodity-for-export operation. The sustainability of this historical position is being threatened.

Our vision is to play a leadership role within the agricultural industry by focusing on our regional strengths and developing new approaches and practices to overcome the challenges. Moreover, we need to engage industry champions as partners to advance technology development.

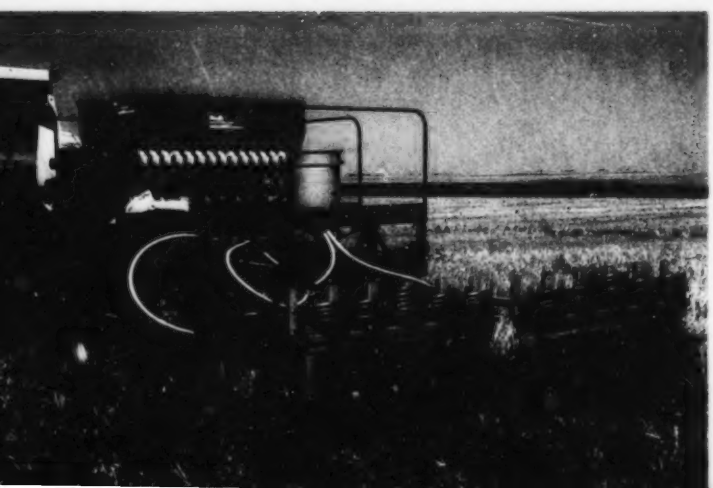
Learning and growing are critical to the sector's sustainability, continued performance, and future prosperity. We must continuously renew our knowledge, expand our expertise base, and provide leadership in our role of applying technology for agriculture.

Our Values:

Integrity, Accuracy, Credibility, Creativity

Our business is innovation. But innovation must be tempered by organizational values in order to succeed. Our service is driven by these values:

- Unbiased testing and evaluation services
- Customer service orientation
- Providing service to a consistent standard of high quality
- Technically outstanding
- Courteous and respectful
- Committed to meaningful work
- Performance and results oriented
- Strategic approach with a big picture focus
- Innovation in a stable and sustainable environment



Our Strengths:

Meeting Client Needs

We provide applied research, experimental development, design, testing, and evaluation services for agricultural producers, machinery manufacturers, agro-processors, and related organizations.

Our unique and specific strengths are in:

- Field work
- Sensor technologies, data capture and analysis
- Technology design and development
- Testing and evaluation to standards or regulatory compliance
- Information research
- Technical writing and communication
- Expertise related to specific agricultural machines and operations

To Our Stakeholders

The world around us is changing, and we are keeping pace.

PAMI's forward-looking vision has seen us evolve from an evaluator of farming tools to a leading-edge provider of integrated, applied research and development and agricultural engineering services.

Our vision, as a partner and ally to producers, manufacturers and processors means having the foresight to anticipate the needs of all three and the resourcefulness to respond with practical solutions.

Our vision gets strong support from both industry and government. Seventy-four per cent of our $4.3 million annual revenue is derived directly from contract R&D work. Twenty-six per cent comes jointly as provincial transfers from Manitoba and Saskatchewan. This industry-government partnership is at the heart of everything we do.

Our vision is a natural evolution of the aims we have always upheld: contributing to the economic well-being of the farm business community, preserving and enhancing quality of life for that community and providing effective and efficient ways for our community to apply technology for agriculture.

Presence

• Over 750 reports on farming equipment and technologies. • Over 3500 recommendations to manufacturers for improvements to operation, function, and safety of tested machinery. • Over 900 research and development projects for manufacturers, producer groups, and government departments have leveraged in the range of $10 to $50 of impact per dollar of cost. • Ten patents. • Six respected how-to manuals and guidebooks published, with two more on the way. • More recently PAMI has developed an expert computerized manure management system and registered a trademark.

That is a snapshot of our history. Our evolution continues to focus on applied research and development — the art and science of making ideas work.

Here's a run-down of our expertise:

- PAMI's Harvesting Division is a leading North American authority in grain harvesting technology and is sought after by many of the major harvester manufacturers.
- Our Soils and Crops group has developed into a Direct Seeding Centre of Excellence.
- Our Livestock Technologies team pioneered swine manure odour control technology and continues to lead the development of new manure management technologies.
- The Energy & Processing Division is now building expertise in value-added crops processing.
- PAMI's Tractor Test Centre has the honour of being Canada's designated authority to the Organization for Economic Cooperation and Development (OECD).
- Other PAMI programs and projects have created innovations like hay-in-a-day technology.
- Our publications have made a lasting impact, communicating easy-to-use information to farmers on topics ranging from the safe transport of farm machinery on public roads (BE SEEN, BE SAFE!™) to building energy-free ways of providing clean water to livestock.

Our accomplishments translate into repeated recognition in industry and on the farm technology scene. The average age of our people is 38, and their careers with PAMI average 10 years. These numbers speak of a continuity, know-how, and the sound experience that complements our industry presence, giving the entire organization an outlook on future opportunities that is grounded in historical perspective.
We're getting recognized outside the industry, too. Our people have become adept at transferring their knowledge and skills.
We've helped provide diagnostic information on stretcher suspension systems for ambulances and through our affiliate, Western Canada Testing Inc., we've become expert at simulated load, fatigue and vibration testing of vehicles and components in a controlled laboratory setting.

We're also getting highly skilled at getting the word out. Our Marketing and Information Services team proactively seeks and takes advantage of opportunities to tell our story to the popular media, offer focussed information and provide tours to media groups. This past year our stories have appeared in the media an average of once every three business days. We're a key reference point in Western Canada for applied R&D solutions in agricultural engineering technology. Journalists and opinion seekers now call us when they want to know.

• Engineering expertise and innovation. • Management and technology leadership. • Publications, media exposure, and promotions. Web sites, trade shows, and conferences. • All are part of an integrated approach that is giving us an intensive presence across a broad base of industries.

Leadership:

Moving Forward

In order to move forward, it is necessary to stop and identify industry sectors that are primed for growth and analyze their needs against our own core competencies.

In 1995 PAMI identified six noticeable trends in agriculture that still hold true today:

- The need for value-added processing R&D for traditional and special crops.
- A continued shift toward stronger agricultural sustainability, for both the land and the industry as a whole.
- Numerous emerging technologies.
- More intensive and growing livestock herd sizes.
- Continued farm diversification through special crops and livestock.
- The ever present need for farm machine safety.

These six trends continue to hold our focus today and we are responding with applied R & D solutions to the challenges that exist in each of these areas. Learning and Growth are critical to our sustainability and continued effectiveness. We must endeavor to continuously renew our knowledge and expertise base to provide leadership in our role within agriculture.

The World Around Us

Visionary Canadian educator of mass media and fortune-teller of the information age, Herbert Marshall McLuhan, might have never guessed that his predictions about information technology would spill over into farming.

For the man who said "The medium is the message", information technologies like precision farming have added a completely new twist to the task of defining the medium.

Today, digital information signals whiz invisibly through the atmosphere, advising farmers on soil and moisture conditions, fertilizer and herbicide rates, and crop yields.

Some farmers and farm businesses are embracing these and other new technologies, but others are asking if all this new technology is necessary. The pull between big business' need to produce better crops faster and more efficiently is sometimes at odds with the smaller operator who needs feasible technology on a smaller scale.

So, while large-scale operators are looking for tomorrow's tools to do today's jobs, small operators could very well be asking for yesterday's tools to do tomorrow's jobs. But all agree there are things they need to accomplish their business goals. PAMI can provide for needs at both ends of this spectrum.

"Our Age of Anxiety is, in great part, the result of trying to do today's jobs with yesterday's tools."
– Marshall McLuhan

Technology for Today, Technology for Tomorrow

"There are many ways of going forward, but only one way of standing still."

– Franklin D. Roosevelt

Chairman's Report:

It is my great pleasure to report on another excellent year at PAMI.

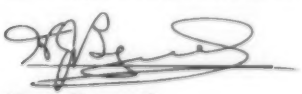
I am extremely pleased with the excellent sense of direction our organization has developed. PAMI is enjoying solid technical and financial management and leadership. Together with the Corporate Management Team, we have guided PAMI using a balanced approach to continue growing a healthy and thriving organization.

PAMI Board: (standing) Henry Begrand, Chairman, Farmer, St. Louis, Saskatchewan; (l-r) Jon Close, Brandt Industries; Dave Donaghy, Assistant Deputy Minister, Manitoba Agriculture & Food; Garvin Kabernick, Farmer, Sanford, Manitoba; Larry Gutek, Saskatchewan Agriculture & Food

With the help of other government agencies and funding, PAMI has spearheaded some major new directions. Construction of the Crops Processing Development Centre was completed in Humboldt this year. PAMI will also be host to a new service and a facility expansion initiative at its WESTEST operation in the next fiscal year. I am confident that each of these new directions will demonstrate significant contributions to local economies and technology advancement in the coming years.

In addition, the vision of our governing provinces has led to changes in the Prairie Agricultural Machinery Institute Act. These revisions strengthen PAMI's mandate and broaden its responsibilities, positioning the organization to meet head-on a farming economy in transition.

It is with a great sense of achievement for the organization and personal fulfillment that I file my final report as Chairman of the Board of the Prairie Agricultural Machinery Institute. I thank the management and staff of PAMI for our excellent working relationship and for what we have learned as team. I encourage you all to seize the new opportunities and tackle the challenges that are sure to come your way in the future.



Henry Begrand

CEO's Report:

Our mission at PAMI is to apply technology for agriculture. So for us "Innovation" means "making ideas work." In order to achieve this we must do two things. We must continuously generate excellent ideas...and we must do the hard work to bring them into reality.

This year we carried out 226 projects for our clients ranging from individuals to giant corporations. We worked in most areas of agricultural production and many new areas of processing. Revenues from this work increased 5% from last year, totaling $3.05 million. We continuously ask our clients how well our work satisfies their needs. This year they scored us at 8.8 out of 10, which is a strong vote of approval.

In addition to our technical project work we provided information services to over 4,000 individuals or groups. Producing and distributing how-to manuals, research findings, and other information is a critical role for us in helping industry players implement ideas profitably and sustainably.

Our stakeholders, the governments of Saskatchewan and Manitoba affirmed our value by making changes to the Act that governs our organization, strengthening our mission and broadening our responsibilities within the prairie agricultural industry. They continued their critical investment in PAMI through base grants, which provided 26% of our operating budget.

This year we made two important achievements in our internal processes. We succeeded in having our quality system registered to ISO 9002. This is our way of formalizing our commitment to quality. We also developed and implemented a remuneration system that creates a win/win relationship between the organization and our people.

When ideas are your bread and butter, then learning and growth are your future. And nowhere is this more applicable than at PAMI. This year, we opened the Crops Processing Development Center, capital-funded by Saskatchewan's Agri-food Innovation Fund and its Strategic Innovations Fund. The Centre is sure to have a major impact in the development of new value-added products made from prairie crops. We also received federal and provincial capital funding assistance to develop two important WESTEST services for implement manufacturers.

Our success as an organization is a result of vision, hard work and dedication...from our Staff, our Management, and our Board. We especially want to thank Mr. Henry Begrand for his years of service as Chairman of our Board. His visionary approach and statesmanlike conduct will long be remembered.

– David Gullacher

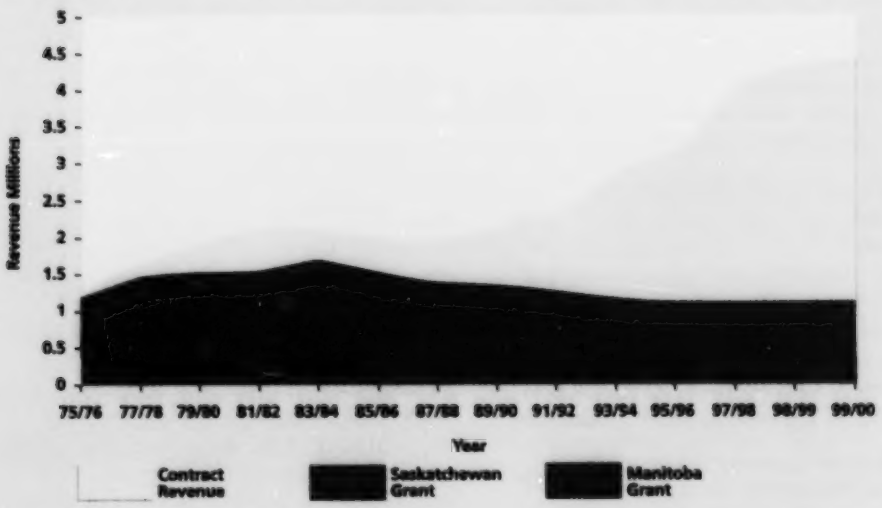
Operation's Manager Report:

PAMI turned in another strong performance financially during the 1998/99 fiscal year showing a net revenue of $87,550 (after expenditures). Provincial transfers remained constant at $1,100,500 while fee-for-service revenues of $3,046,600 exceeded budget by 9%. Correspondingly, due to the additional fee-for-service work, expenses were up 7% from budget. Figure 1 shows PAMI's sources of revenue over the life of the organization.

Revenues are received from private companies, industry associations, funding agencies, provincial governments, and other miscellaneous sources as shown in Figure 2.

Infrastructure investments totaling $2,758,975 were made during the year, helping PAMI to continue investing in its future with new and existing facility upgrades in Portage la Prairie and Humboldt. The construction of the new

FIGURE 1



Crops Processing facility ($1,650,000) will enable PAMI to expand services to existing and new clients. Funding for this facility was provided by the Saskatchewan Agri Food Innovation Fund and Saskatchewan's Department of Economic Development.

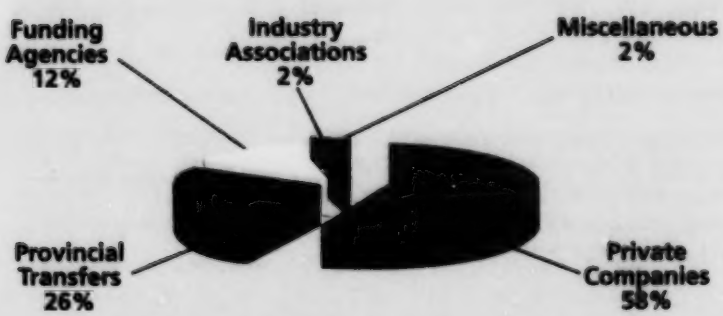
PAMI's contractual relationship with Western Canada Testing Inc. (WESTEST) continues to provide tremendous benefit to industries in Western Canada. Close to the end of the 1998/99 fiscal year WESTEST obtained $741,000 in funding from Canada's Western Diversification Office that will help expand the Force, Load, and Vibration Simulation facility at Portage la Prairie during the 1999/2000 fiscal year. WESTEST also received $367,975 in provincial and federal support to start a technical coaching service for Canadian agricultural machinery manufacturers wishing to sell product into the European market.

Another highlight during the fiscal year was the finalization of a new salary policy for PAMI. This policy ties market salaries to individual salaries paid by PAMI and further ties individual salaries to short and long term job performance. This new policy will help PAMI offer competitive salaries and also enable management to ensure that salaries are affordable to PAMI and its clients.

Management is entering the 1999/2000 fiscal year confident that it will be as good a year financially as the one just completed. Several new and exciting projects are on the horizon that will enable PAMI to continue its commitment to prairie agriculture.

– Barrie Broad

FIGURE 2



Letters of Transmittal

PAMI

Humboldt, Saskatchewan

March 31, 1999

Honourable Eric Upshall
Minister of Agriculture and Food,
Province of Saskatchewan

Honourable Harry Enns,
Minister of Agriculture,
Province of Manitoba

Sirs:

It is my honour to present the annual report of the Prairie Agricultural Machinery Institute for the year ended March 31, 1999.

Respectfully submitted,

H. Begrand, Chairman
Prairie Agricultural
Machinery Institute

Minister of
Agriculture and Food

Legislative Building
Regina, Saskatchewan S4S 0B3
(306) 787-5866

March 31, 1999

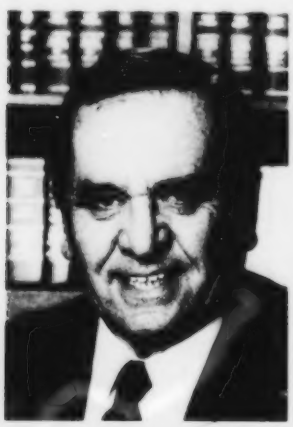
His Honour
The Honourable Jack Wiebe
Lieutenant Governor
Province of Saskatchewan

Your Honour:

I have the honour to submit the annual report of the Prairie Agricultural Machinery Institute for the year ended March 31, 1999. It includes the Financial Statements duly certified by the Provincial Auditor.

Respectfully submitted,

Honourable Eric Upshall
Minister of Agriculture and Food



Honourable Harry Enns

Minister of Agriculture

Province of Manitoba

Honourable Eric Upshall

Minister of Agriculture and Food

Province of Saskatchewan

Soils & Crops

Fast Facts

Number of Clients: 6

Number of Projects: 11

Activity Areas: Sustainable Agriculture, Livestock

Support: Producer groups, farm associations, government departments, and private sector.

Target Impact: Enhance crop production efficiencies for Prairie producers by providing direct, hands-on, practical research and information producers can use immediately.

Project Highlight

Activity Area: Sustainable Agriculture, Value-added

Project: Low Disturbance Manure Injection

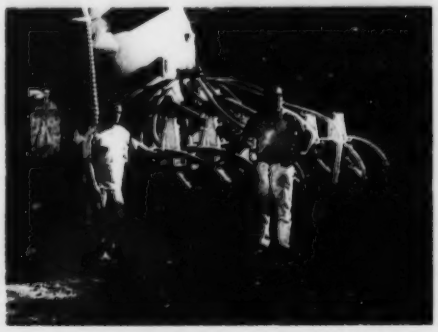
Partners: Agriculture Development Fund, Saskatchewan Agriculture & Food, on behalf of District 21 ADD Board

Value: $52,000

Target Impact: To add fertilizer value to hog manure for use in sustainable farming systems.

Objective: Twenty per cent of Saskatchewan farmers use zero-tillage or direct seeding technologies, but have no tools for low disturbance injection of liquid manure into standing stubble. PAMI developed a specialized opener for this purpose that has since been commercialized by Bourgault Industries, a Saskatchewan-based manufacturer of tillage and seeding equipment.

Gord Hultgreen, Project Manager: "Hog producers now have another potential market for manure, making it more valuable as a fertilizer. Direct seeders now have a tool to inject hog manure, reducing reliance on traditional fertilizers. A local manufacturer has a business opportunity. This project was truly a win-win situation."



PAMI originally modified a Bourgault mid-row bander for low disturbance manure injection, which was further refined by Bourgault engineers before mounting it on a toolbar and installing it on farmer Allan Caner's (above at right) injection truck for field trials.

The manufacturer's spokesperson advises the opener will be available in limited quantities in the spring of 2000.

Harvesting

Fast Facts

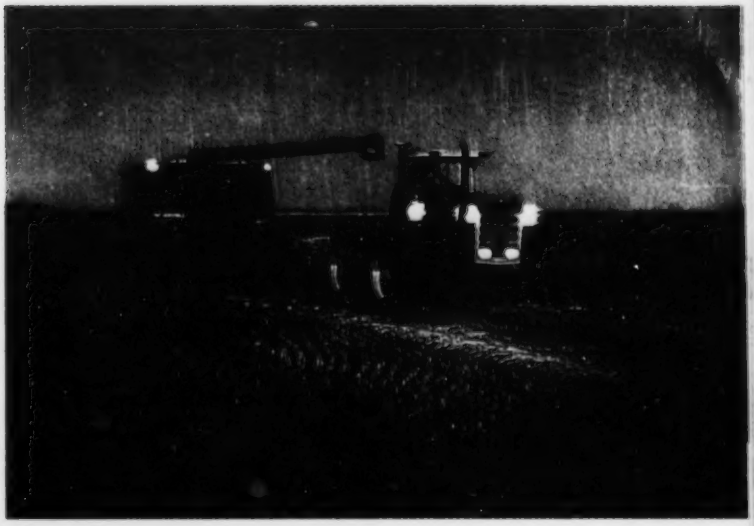
Number of Clients: 4

Number of Projects: 16

Activity Areas: Sustainable Agriculture, Emerging Technologies

Support: Ongoing grant funding has helped PAMI develop core competencies in harvesting expertise, allowing the generation of significant revenues through private sector contract work.

Target Impact: PAMI's harvesting development work with major manufacturers ensures Prairie producers can get harvesting technology that is developed to suit their harvesting needs.



Project Highlight

Activity Area: Sustainable Agriculture

Project: Survey to Determine Feasibility of a Saskatchewan Designed and Built Pull-Type Combine

Partners: College of Commerce, University of Saskatchewan

Value: $4950

Target Impact: This in-house funded project will determine the potential for a new Saskatchewan-produced machine.

Objective: There may be a niche market of producers who prefer to use lower cost, pull-type combines in order to sustain their smaller scale operations. These producers are currently using older pull-types which are approaching the end of their life cycle. To determine if Saskatchewan and the Prairies could sustain a market for and a manufacturer of pull-type combine technology, PAMI initiated a survey of Saskatchewan producers. Sixty-one per cent of those surveyed said they would consider a pull-type combine if it was priced right and had the right combination of features.

Les Hill, Project Manager: "This is one of many first-steps we need to take to help smaller producers remain efficient on small farms, and bring new, appropriate opportunities to our regional manufacturing sector."

Tractors, Hay & Forage, Livestock

Fast Facts

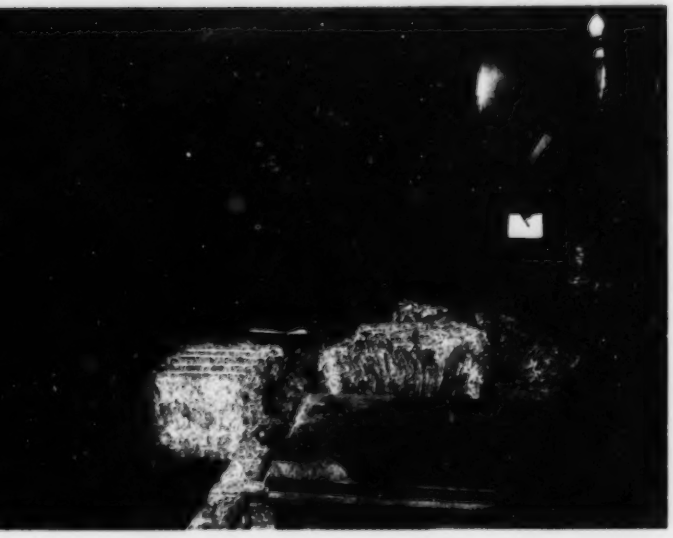
Number of Clients: 21

Number of Projects: 26

Activity Areas: Safety, Emerging Technologies, Sustainable Agriculture, Diversification (special crops and special livestock), Traditional Livestock, Value-added Processing.

Support: Producer groups, farm associations, government departments, and private sector partners.

Target Impact: Deliver direct, beneficial applied R&D results for producers and manufacturers that focus on their critical factors to success in existing, new, and emerging markets and technologies.



Project Highlight

Activity Area: Value-added

Project: Enhance processing line for compacted forage products

Partners: Sunridge Forage, Rural Economic Development Initiative

Value: $27,816

Target Impact: Helping to create more access to new markets for Prairie forage crops.

Objective: Overseas clientele have exacting requirements when buying compacted forage products. With this project, PAMI supplied engineering design and expertise that enhanced the efficiency and performance of a value-added forage processing line, which ultimately improved the finished product.

Don Petkau, Project Manager: "Small, local manufacturers are innovative and skilled at finding new markets for traditional commodities, but they often need a broad range of technical expertise to efficiently manufacture a product. With a little engineering know-how, we can help innovators and small manufacturers access more market share by helping them give their customers the product features they're looking for."

Double compressed timothy bales come off the Sunridge processing line. Making denser, smaller bales makes freight to export markets more affordable.

Energy & Processing

Fast Facts

Number of Clients: 6

Number of Projects: 10

Activity Areas: Sustainable Agriculture, Emerging Technologies, Value-added, Livestock

Support: Government and industry partners.

Target Impact: The responsible growth of value-added industries on the Prairies through applied research and development of appropriate technology that spans the spectrum of traditional and special crops, and livestock.

Project Highlight

Activity Area: Value-added

Project: Establishment of the Crops Processing Development Centre (CPDC) to assist in developing value-added products from traditional and specialty prairie crops.

Partners: Agri-Food Innovations Fund, Saskatchewan Economic Development, University of Saskatchewan, POS Pilot Plant Corporation

Value: $1,850,000

Target Impact: To develop technology that adds value to agricultural residues, traditional crops, and special crops.

Objective: Saskatchewan has a strong, emerging value-added industry. The CPDC was established to help meet the applied research, pilot plant, and prototype testing and development needs of clients in the areas of field production and primary processing. The ultimate goal is to help clients commercialize new products and processes.

Darrell Lischynski, Project Manager: "The CPDC is about bringing hands-on expertise and equipment to the innovation table. There are opportunities to transform what is now considered waste; to add value to products we already make, such as high nutrition animal feed, and accelerating the new product and process development cycle."

Crops Processing Development Centre (CPDC) Manager Darrell Lischynski (left) explains the work the CPDC will do in value-added, primary crops processing development to (l-r) Arlene Jule, MLA for Humboldt, Hon. Janice MacKinnon, Saskatchewan Minister of Economic and Co-operative Development, Henry Begrand, PAMI Chairman of the Board, and Roger Wong, Industrial Research Assistance Program.

Applied Technologies

Fast Facts

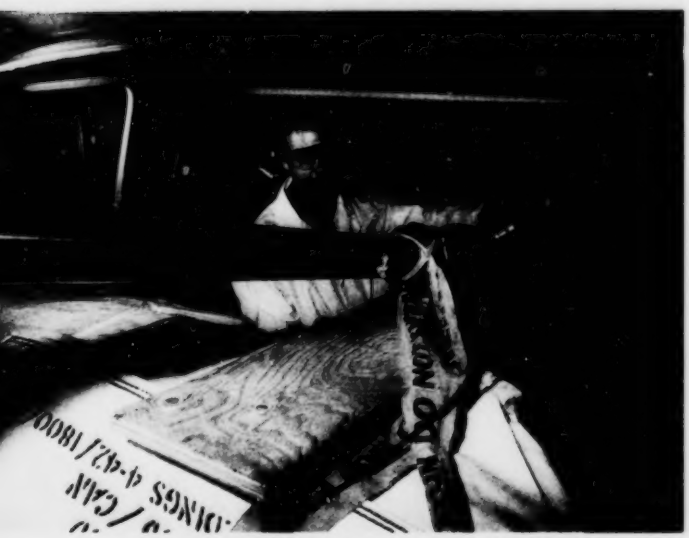
Number of Clients: 12

Number of Projects: 15

Activity Areas: Safety, Emerging Technologies, Sustainable Agriculture

Support: Private sector

Target Impact: Strengthening the machinery and equipment manufacturing sector on the Prairies by applying technologies that help manufacturers be more innovative, more competitive, and more efficient.



Standards and safety testing is not limited to agricultural or industrial equipment. Here, a recreational vehicle undergoes a seat belt compliance test.

Project Highlight

Activity Area: Safety

Project: Standards and Safety Testing

Partners: Various Manufacturers

Value: $35,250

Target Impact: Opening the doors to new markets for local and regional manufacturers.

Objective: Concern about product safety and standards compliance is very real for most manufacturers. Independent, third-party testing offers clients the credibility they need to gain access to other geographic markets that have unique safety and standards requirements and need proof that they have exercised due diligence in protecting the safety of their customers.

Troy Lucyshyn, Project Manager: "Small business represents a big contribution to the overall economic well-being of smaller prairie centres. By supplying testing services to these clients, we help them cost-effectively manage liability exposure, and at the same time help them gain access to international markets."

Information Services – Extension & Support

Fast Facts

Annual Information Requests: Farmers: 916; Business/Manufacturers: 140

Research Update Subscribers: 2,500

Industry Newsletter Subscribers: 2,250

Direct Seeding Mailing List: 6,148

Total data transferred annually to users from web site: 1,229 gigabytes

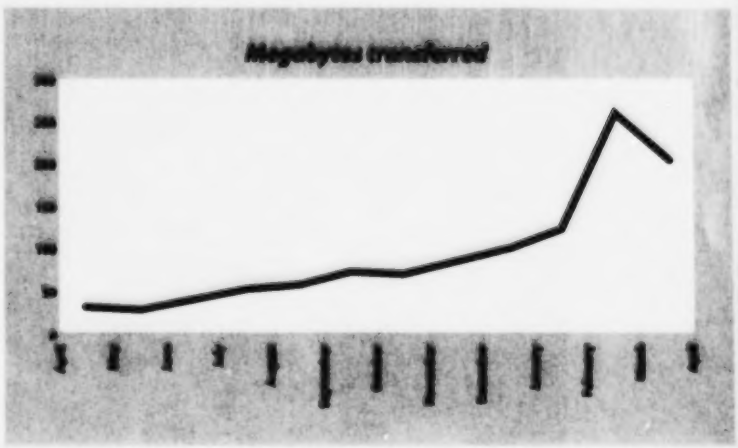
Reports distributed electronically via web site (Dec 1, 1998 - April 1, 1999): 1,734

Media coverage of PAMI (annualized): 1 event per 3 business days

Activity Areas: Safety, Emerging Technologies, Sustainable Agriculture, Diversification (special crops and special livestock), Traditional Livestock, Value-added Processing

Support: Ongoing grant funding

Target Impact: Building and distributing information resources to help Prairie producers and manufacturers advance farming efficiencies and technologies.



Web site access data clearly shows the future of information access.

Project Highlight

Activity Area: Safety

Project: Trademark Licensing

Partner: SMV Technologies

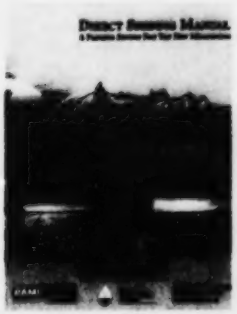
Value: $1,586

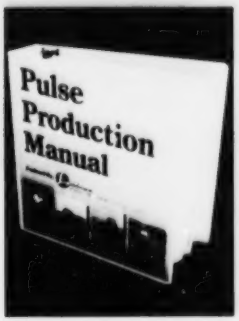
Target Impact: To raise funds for farm machinery safety programs and projects.

Objective: In a strategy intended to generate funds for the promotion of farm safety, PAMI has trademarked the title of its popular guide to lighting and marking of farm equipment on Manitoba roads entitled BE SEEN, BE SAFE!™ Companies wishing to use the BE SEEN, BE SAFE!™ trademark to advertise and market farm safety and visibility products can enter into a royalty agreement with PAMI. Funds generated from such agreements will be re-invested in other farm safety related research and development programs.

Dan Dyck, Communications Coordinator: "There is much work that can be done to improve the safety of farming operations. By trademarking and licensing a popular phrase, we hope to generate the money needed for projects that can help reduce farm accidents."

PAMI has produced numerous information tools for producers in recent years.





Support Services

Objective: To exceed client expectations by providing expert technical and administrative support to internal and external customers.

Target Impact: Empowering and enabling clients to achieve their overall organizational objectives.

Activities: Administration, Technical Support

Clients: Agricultural Producers, Manufacturers, Agri-business, Suppliers, other External/Internal Clients, Government Departments

Highlights: This year saw the achievement of our ISO 9002 quality system registration. Many of the support staff worked long and hard at writing documentation implementing tracing procedures and conducting preliminary audits to comply with the requirements of ISO. We can now proudly say we are ISO 9002 registered and use this achievement to promote services to a marketplace that is increasingly demanding ISO qualified suppliers.

WESTEST

WESTEST was created in 1991 to provide access to sophisticated physical testing and product performance evaluation services using modern testing equipment under the direction of professional engineers and technologists.

These services add value, reliability, and enhance safety of clients' products and components by subjecting them to tests that simulate field conditions or standardized test procedures in a controlled environment. Prior to the establishment of WESTEST, manufacturers had to use laboratories in Eastern Canada or the US for these kinds of services.

The need for WESTEST was initially envisioned by a group of industry members in association with PAMI's senior management. They pooled their resources and leveraged funding from Canada's Western Diversification Office to create this unique testing facility in Western Canada.

WESTEST is owned by majority shareholder PIMA (Prairie Implement Manufacturers Association), and four others: Manitoba Hydro, Saskatchewan Mining Association, Case Corporation, and John Deere. Management and technical services for ongoing programs and activities are provided by PAMI through a management contract. WESTEST also shares facilities with PAMI.

Because of the sensitive nature of much of its work, confidentiality and security are key considerations.

Fast Facts

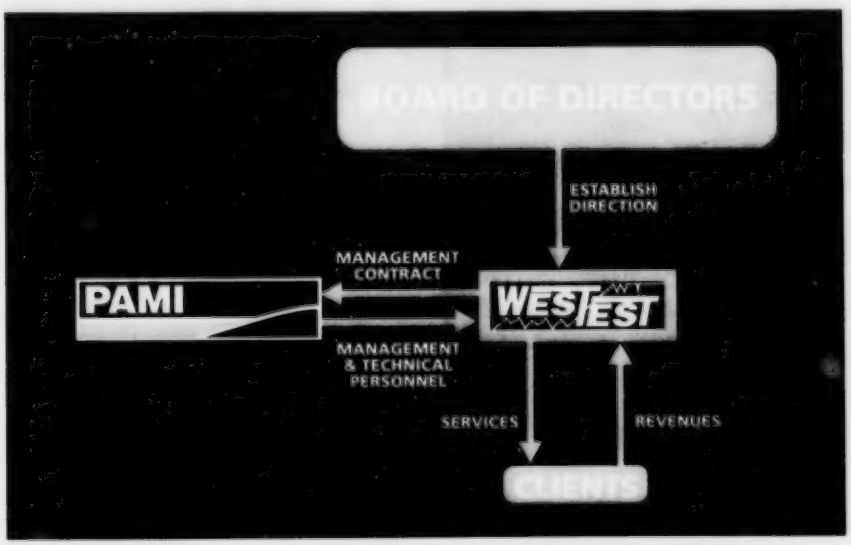
Number of Clients: 52

Number of Projects: 148

Activity Areas: Mechanical Testing, Standards Testing, Package Testing

Support: Private Sector

Target Impact: Growing the manufacturing economy in Western Canada by helping clients strengthen their product lines and build export ready products through mechanical, standards, and compliance testing activities.



Project Highlight

Activity Area: Mechanical Testing

Project: Validation of Third-party Supplied Components

Partner: New Holland Canada

Value: Confidential

Target Impact: Strengthening the market position of a local manufacturer.

Objective: From time to time manufacturers revise their products by sourcing alternative component suppliers. In order to gain confidence in a new component supplier, validation tests are conducted. In this case, WESTEST conducted validation tests on components that were part of a three-point hitch on a Ford New Holland tractor. The drop and catch tests cycled the hitch through 100,000 drops and lifts of a simulated three point hitch dead weight load. The components passed the durability test, clearing the purchase from the new supplier.

Ryan Schott, Project Manager: "Manitoba is home to Canada's only agricultural tractor manufacturer. If we can help them build a better product, our farmers get better tractors, and we become partners with them in contributing to the economic development of the region through jobs and third-party supplied components and services."

Sensors interfaced with a computer to control this tractor as it cycled through 100,000 drop and catch phases to test three-point hitch components. A deadweight provided the load. In service testing took about 140 hours.

PAMI's People

ABREY, Rachel	Office Assistant
BAY, Ted	Shop Manager
BOYDEN, Allan	Project Technologist
BROAD, Barrie	Operations/Q.A. Manager
BURTON, Gregory	Computers Manager
CARMICHAEL, Ken	Technical Services Manager
CARR, Terry	Project Support
CLEAVER, Cam	Shop Technician
COLLINS, James	Project Support
COOK, Murray	Shop Technician
CROSS, Errol	Caretaker
DOEPKER, Gordon	Maintenance
DOEPKER, Sharon	Librarian
DYCK, Dan	Communications Coordinator
GARRIOCH, Jodi	Office Assistant
GRIEGER, Lorne	Project Leader
GULLACHER, David	President/CEO
HAEUSLER, Marina	Admin. Assistant/Q.A. Coordinator
HARRIS, Robert	Project Manager
HILL, Les	Project Manager
HULTGREEN, Gordon	Project Manager
JACKSON, Carol	Customer Service Representative
KELLY, David	Project Technologist
KERNOT, Warren	Shop Technician
KING, Lindy	Admin. Assistant/Q.A. Coordinator
KLAPAK, Nelson	Project Leader
KOSKI, Peter	Shop Assistant
KRUSHELNISKI, Kyle	Project Leader
LECHLER, Mark	Project Leader
LEDUC, Philip	Manager, Research & Development
LEPAGE, Dianne	Office Assistant
LISCHYNSKI, Darrell	Project Manager
LOVELL, Perry	Project Technologist
LUCYSHYN, Troy	Project Manager
MALINSKI, Marilyn	Accounting Assistant
MARIANCHUK, Mark	Project Leader
MAY, Douglas	Station Manager
MICHIE, Mark	Project Leader
PETKAU, Don	Project Manager
RAUERT, Andrew	Shop Technician
RUDE, Derek	Project Technologist
SCHOTT, Ryan	Project Manager
STOCK, Wayne	Project Technologist
SZAUTNER, Laurie	Office Assistant
WASSERMANN, James	Station Manager

Corporate Management Team

David Gullacher, President/CEO

Barrie Broad, Operations Manager

Doug May, Station Manager, Portage la Prairie

Jim Wassermann, Station Manager, Humboldt

Management's Responsibility for Financial Statements

The Financial Statements and other related financial information contained in the annual report are the responsibility of management and have been approved by PAMI Council.

Preparation of these statements has been done according to generally accepted accounting principles in Canada. Financial data elsewhere in the annual report is consistent with information contained in the annual report.

PAMI maintains a system of internal controls designed to provide reasonable assurance that the financial information is reliable and that the corporate assets are safeguarded. The Provincial Auditor for Saskatchewan is appointed by legislation to annually audit the accounts and financial statements of PAMI. His report follows.

David Gullacher,
President/CEO

Barrie Broad,
Operations Manager

Prairie Agricultural Machinery Institute

FINANCIAL STATEMENTS

For the Year Ended March 31, 1999

AUDITOR'S REPORT

To the Members of the Legislative Assembly of Saskatchewan

I have audited the balance sheet of the Prairie Agricultural Machinery Institute as at March 31, 1999 and the statements of revenue, expenses and net assets, and cash flows for the year then ended. The Institute's management is responsible for preparing these financial statements for Treasury Board's approval. My responsibility is to express an opinion on these financial statements based on my audit.

I conducted my audit in accordance with generally accepted auditing standards. Those standards require that I plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In my opinion, these financial statements present fairly, in all material respects, the financial position of the Prairie Agricultural Machinery Institute as at March 31, 1999 and the results of its operations and its cash flows for the year then ended in accordance with generally accepted accounting principles.

W.K. Strelioff

Regina, Saskatchewan
May 7, 1999

Wayne Strelioff, CA
Provincial Auditor

PRAIRIE AGRICULTURAL MACHINERY INSTITUTE

BALANCE SHEET As at March 31

	1999	1998
ASSETS		
Current:		
Due from General Revenue Fund (Note 3)	$ 471,011	$ 659,565
Short-term investments	314,780	—
Accounts receivable	866,750	586,849
Prepaid expenses	48,427	18,211
	1,700,968	1,264,625
Restricted cash	34,635	34,635
Capital assets (Note 4)	2,638,859	1,458,120
	$ 4,374,462	**$ 2,757,380**
LIABILITIES AND NET ASSETS		
Current:		
Bank indebtedness	$ 18,480	$ 98,211
Accounts payable and accrued liabilities	385,475	475,248
Unearned revenue	423,826	62,562
	827,781	636,021
Deferred grants (Note 5)	1,370,907	—
Due to Government of Alberta (Note 6)	85,201	118,336
	1,456,108	118,336
	2,283,889	754,357
Net assets (Statement 2)	2,090,573	2,003,023
	$ 4,374,462	**$ 2,757,380**

(See accompanying notes to financial statements)

PRAIRIE AGRICULTURAL MACHINERY INSTITUTE

STATEMENT OF REVENUE, EXPENSES AND NET ASSETS Year Ended March 31

	Budget (Note 11)	1999	1998
Revenue			
Provincial transfers:			
Saskatchewan – General Revenue Fund			
– Department of Agriculture and Food	$ 768,000	$ 768,000	$ 768,000
– Department of Economic and Co-operative Development	—	—	2,500
Manitoba – Consolidated Fund			
– Department of Agriculture	332,500	332,500	332,500
	1,100,500	1,100,500	1,103,000
Fee for service	2,784,512	3,046,600	2,905,207
Subscription income	20,000	29,364	25,092
Investment income	10,000	32,100	21,482
Other income	7,000	18,032	12,420
Total revenue	3,922,012	4,226,596	4,067,201
Expenses			
Salaries	1,820,611	1,988,085	1,851,977
Operating	1,901,401	2,013,669	1,835,893
Amortization	125,000	137,292	122,435
Total expenses (Schedule 1)	3,847,012	4,139,046	3,810,305
Excess of revenue over expenses	75,000	87,550	256,896
Net assets, beginning of year	2,003,023	2,003,023	1,746,127
Net assets, end of year (Statement 1)	**$ 2,078,023**	**$ 2,090,573**	**$ 2,003,023**

(See accompanying notes to financial statements)

PRAIRIE AGRICULTURAL MACHINERY INSTITUTE

STATEMENT OF CASH FLOWS Year Ended March 31

	1999	1998
Operating activities:		
Excess of revenue over expenses	$ 87,550	$ 256,896
Changes in non-cash working capital items:		
(Increase) decrease in accounts receivable	(133,656)	2,449
(Increase) decrease in prepaid expenses	(30,216)	502
(Decrease) increase in accounts payable and accrued liabilities	(89,773)	206,857
Increase (decrease) in unearned revenue	361,264	(58,160)
	107,619	151,648
Items not involving cash:		
Amortization of deferred grants	(6,864)	—
Amortization expense	137,292	122,435
Bad debt expense	15	52,041
Loss on disposal of capital assets	4,223	33,551
	134,666	208,027
(Decrease) in due to Government of Alberta	(33,135)	(16,427)
Cash flows from operating activities	296,700	600,144
Investing activities:		
Proceeds on sale of capital assets	1,544	10,757
Purchase of capital assets	(1,323,813)	(132,314)
Cash flows used in investing activities	(1,322,269)	(121,557)
Financing activities:		
Contributions for capital assets (Note 5)	1,231,526	—
Cash flows from financing activities	1,231,526	—
Net increase in cash and cash equivalents	205,957	478,587
Cash position, beginning of year	595,989	117,402
Cash position, end of year	$ 801,946	$ 595,989
Cash position consists of:		
Due from General Revenue Fund	$ 471,011	$ 659,565
Short-term investments	314,780	—
Restricted cash	34,635	34,635
Bank indebtedness	(18,480)	(98,211)
	$ 801,946	$ 595,989

(See accompanying notes to financial statements)

PRAIRIE AGRICULTURAL MACHINERY INSTITUTE

NOTES TO THE FINANCIAL STATEMENTS March 31, 1999

1. SIGNIFICANT ACCOUNTING POLICIES

These financial statements have been prepared in accordance with generally accepted accounting principles. The significant accounting policies of the Prairie Agricultural Machinery Institute (Institute) are as follows:

a) Accrual Basis

The financial statements are prepared on the accrual basis of accounting.

b) Short-term Investments

Short-term investments are recorded at cost which approximates their fair market value.

c) Capital Assets

Capital assets are recorded at cost less accumulated amortization. Amortization is recorded using the declining balance method of amortizing capital assets over their expected useful life. The following rates have been used in applying this policy:

Building	5%
Equipment	10%
Furniture	10%
Vehicles	10%
Computer Hardware	30%

d) Unearned Revenue

Unearned revenue consists of subscription and fee for service revenue that will be earned in future periods. These amounts are included in income when revenue is earned.

e) Deferred Grants

Contributions that are restricted for a specified use are initially deferred and are recorded as revenue when the related expenses are incurred. Contributions for capital assets are deferred until the assets are put in use and amortized. The amount of revenue that is recognized is equal to the amount of amortization charged for the capital assets.

f) Fee for Service Revenue

Fee for service revenue on contracts is recognized using the percentage of completion method.

g) Funding

The Institute's operations are funded by Saskatchewan and Manitoba according to an agreement between the two provinces.

The Institute, in accordance with the authority included in Order in Council 1800/79, follows the policy of retaining any excess of revenue over expenses.

On wind-up, any net assets will be divided among the two provinces in proportion to their share in the Institute's assets equivalent to the percentage of funding provided by each province.

2. INCORPORATION

The Institute was established as a body corporate under The Prairie Agricultural Machinery Institute Act. The affairs and business of the Institute are managed by the Prairie Agricultural Machinery Institute Council (Council).

The purposes of the Institute are:

a) to test and appraise under actual or simulated working conditions, machinery sold or offered or intended for sale;

b) to undertake development work to improve and develop machinery for agricultural use;

c) to publish such reports, pamphlets and bulletins as are consistent with the intent of the Act; and

d) to perform such additional functions as may be determined by Council to be consistent with the objectives of the Institute.

3. DUE FROM GENERAL REVENUE FUND

One of the Institute's bank accounts is included in the Consolidated Offset Bank Concentration (COBC) arrangement for the Government of Saskatchewan.

The Institute's earned interest is calculated and paid by the General Revenue Fund on a quarterly basis using the Government's thirty-day borrowing rate (1999 average rate - 5.04%; 1998 average rate - 3.77%) and the Institute's average daily bank account balance

4. CAPITAL ASSETS

	1999			1998
	Cost	Accumulated Amortization	Net Book Value	Net Book Value
Buildings	$ 3,118,899	$ 1,487,928	$ 1,630,971	$ 572,411
Equipment	1,440,085	871,789	568,296	442,656
Land & improvements	225,962	—	225,962	225,962
Furniture	191,566	161,057	30,509	26,299
Vehicles	171,986	142,017	29,969	35,219
Computer equipment	245,301	157,513	87,788	90,209
Building under construction	65,364	—	65,364	65,364
Total	**$ 5,459,163**	**$ 2,820,304**	**$ 2,638,859**	**$ 1,458,120**

5. DEFERRED GRANTS

During the year, the Institute received contributions of $1,006,525 (1998 – $0) from the Agri-Food Innovation Fund (AFIF) and $225,000 (1998 – $0) from the Department of Economic and Co-operative Development, related parties. An additional amount of $146,245 (1998 – $0) is receivable from AFIF at year-end. These amounts are to build and equip the Humboldt Crops Processing Centre. The Institute recorded $6,864 (1998 – $0) as revenue equal to the amount of amortization recorded for the Centre.

6. DUE TO GOVERNMENT OF ALBERTA

Effective March 31, 1988, Alberta terminated its participation in the original agreement dated October 1974. This agreement established the Institute as a collaboration of the provinces of Saskatchewan, Alberta and Manitoba. As part of the termination, the Institute agreed to transfer to Alberta 35% of the Institute's net assets as at March 31, 1988. The amount owing to Alberta is $85,201 (1998 – $118,336). The Institute is discharging this liability by performing services for Alberta.

7. COMMITMENTS

The Institute has agreed to provide monetary and in-kind contributions for several research and development contracts entered into in 1998/99. The commitments at March 31, 1999 amount to $10,957 (1998 – $22,000).

8. FINANCIAL INSTRUMENTS

a) Significant terms and conditions

Significant terms and conditions related to financial instruments may affect the amount, timing and certainty of future cash flows. When such significant terms and conditions exist, they are described separately in the financial statements and the notes thereto.

b) Fair value

For certain of the Institute's financial instruments including:

i) due from General Revenue Fund
ii) short-term investments
iii) restricted cash
iv) accounts receivable
v) bank indebtedness
vi) accounts payable and accrued liabilities

the carrying amounts approximate fair value due to the immediate or short-term maturity of these financial instruments.

c) Credit risk

The Institute is exposed to credit risk from the potential non-payment of accounts receivable. The Institute has entered into contracts with both the federal and provincial governments. The Institute has also entered into contracts with private organizations and individuals. The credit risk on these accounts receivable is minimal. All accounts considered uncollectible are included in an allowance for doubtful accounts.

d) Interest rate risk

The Institute is exposed to interest rate risk when the value of its financial instruments fluctuates due to changes in market interest rates. The Institute's receivables from governments are non-interest bearing. Receivables from private organizations and individuals bear interest at two percent. The Institute's payables are non-interest bearing.

e) Currency risk

The Institute is exposed to currency risk when the value of its financial instruments held in U.S. currency fluctuates. This occurs due to changes in the value of the U.S. dollar relative to the Canadian dollar. At March 31, 1999, the Institute had no accounts receivable (1998 – $77,217) in U.S. dollars.

9. RELATED PARTY TRANSACTIONS

These financial statements include transactions with related parties. The Institute is related to all Saskatchewan Crown agencies such as departments, corporations, boards and commissions under the common control of the Government of Saskatchewan. Also, the Institute is related to non-Crown enterprises that the Government jointly controls or significantly influences.

a) Operating Activities

Routine operating transactions with related parties are recorded at the standard rates charged by these organizations and are settled on normal trade terms. Those transactions and amounts outstanding at year-end are as follows:

	1999	1998
Fee for service revenue	$293,755	$221,805
Operating expenses	371,162	208,963
Accounts receivable	152,358	98,055
Accounts payable and accrued liabilities	8,696	22,255

In addition, the Corporation pays Saskatchewan Education and Health Tax to the Saskatchewan Department of Finance on all its taxable purchases. Taxes paid are recorded as part of the cost of those purchases.

Other transactions with related parties and amounts due to/from them are described separately in the financial statements and the notes thereto.

b) Management Agreement

In 1991, the Institute agreed to provide management, marketing, financial and consulting services to Western Canada Testing Inc. (WCTI), to negotiate contracts on behalf of WCTI, to bill and collect fees from WCTI clients, and to provide labour for the operation of the WCTI laboratory. In return for these services, WCTI pays the Institute a quarterly fee based on amounts it receives from clients for services rendered. During the year, the Institute earned $1,062,547 (1998 - $447,824) from this arrangement and as at March 31, 1999, $268,274 (1998 - $183,445) is included in accounts receivable.

10. YEAR 2000

The Year 2000 issue arises because many computerized systems use two digits rather than four to identify a year. Date-sensitive systems may recognize the year 2000 as 1900 or some other date, resulting in errors when information using year 2000 dates is processed. In addition, similar problems may arise in some systems which use certain dates in 1999 to represent something other than a date. The effects of the Year 2000 issue may be experienced before, on, or after January 1, 2000. If not addressed, the impact on operations and financial reporting may range from minor errors to significant systems failure which could affect an entity's ability to conduct normal business operations. It is not possible to be certain that all aspects of the Year 2000 issue affecting the entity, including those related to the efforts of customers, suppliers, or other third parties, will be fully resolved.

11. BUDGET

The budget for 1998/99 was approved by the Council on March 31, 1999.

12. COMPARATIVE FIGURES

Certain comparative figures have been restated to conform with the current year's presentation.

PRAIRIE AGRICULTURAL MACHINERY INSTITUTE

SCHEDULE OF EXPENSES

Year ended March 31

Schedule 1	**1999**	**1998**
Salaries	$ 1,988,085	$ 1,851,977
Travel and vehicle operations	478,586	368,553
Shop supplies	320,402	276,144
Contractual services	317,844	221,888
Employee benefits	279,296	230,601
Amortization expense	137,292	122,435
Insurance, licences and taxes	130,024	106,344
Repairs and maintenance – building and equipment	127,476	152,126
Stationery and office supplies	79,512	81,935
Utilities	75,613	65,742
Telephone	66,928	56,361
Computer services	41,259	60,054
Advertising and promotion	24,067	25,017
Professional and technical services	22,280	57,472
Reference material	14,545	10,975
Printing and binding	14,048	13,326
Rent - building and equipment	11,675	20,159
Interest expense	4,996	2,434
Other expense	4,223	33,551
Honoraria	880	1,170
Bad debt expense	15	52,041
	$ 4,139,046	$ 3,810,305

(See accompanying notes to financial statements)